SECTION 2
CARS (CONSTRUCTION AUTOMATED RECORDS SYSTEM)

CARS PROCEDURES

The Construction Automated Records System or CARS is the NDDOT's computer based construction records system. The system uses the internet for data entry and stores project records on a central database. Reports generated in CARS can be viewed online at any time so copies do not have to be printed and filed. Pay estimates are prepared and approved online allowing for more timely payments to the contractor.

User ID & Passwords

Before being able to enter or view data, CARS users are assigned a user ID and user's rights by the Information Technology Division. The user ID and a password allow you to login to the CARS system. The user rights assigned determines what access you have to view and edit data. Consultants, counties and cities must fill out and submit SFN 53085 LDAP Account Information to Construction Services in order to get a user ID and be assigned user rights. DOT employees will be required to fill out the LDAP Account Information form and submit it along with SFN 14272 Request for Computer Software/Equipment & Computer System Changes. The request must be signed by their division director and submitted to the Information Technology Division.

The SFN 53085 LDAP Account Information form can be obtained by going to the following address:

www.state.nd.us/eforms/Doc/sfn53085.pdf

User ID information will be mailed to the CARS coordinator for cities, counties and consultants. Department employees will receive User ID information by email.

If you will be using temporary employees for data entry, you will have to submit the LDAP Account Information form for that employee. The Information Technology Division should also be informed when a User ID is no longer being used such as when temporary or permanent employees are no longer working for an organization. User ID's will be audited for activity from time to time and if no activity is shown within a certain time frame, the User ID will be removed.

The User ID will be sent out with a generic password and the user will be required to change their password the first time they log in to CARS. To change your password:

1. Click on the Change Password link.
2. Sign in with your User ID and the generic password given to you by ITD. The Change Password page is displayed.
3. Enter your new password. Passwords are case sensitive and must contain the following:
   a. At least 6 characters
   b. At least 1 uppercase letter
   c. At least 2 lower case letters

d.   At least 1 number
4.   Type the password in the second text box to confirm and click on the Login key. This will take you to the Main Menu of CARS.

Write down your password and store it in a secure location. If you forget your password, contact the Information Technology Division. Consultant, county and city users will be required to know the answers to the two hint questions submitted on the LDAP Account Information form or they will be unable to get their password information.

Login to the CARS Program
Access to the CARS programs is provided on the NDDOT website. To access CARS:

1. Go to the DOT website at http://www.dot.nd.gov/.
2. From the home page, click on the 'Doing Business with NDDOT button
3. A link for CARS can be found on the 'Doing Business' page under the Construction Division heading.
4. Click on the CARS link to go to the Login page.
5. Type in User ID and Password and click the Login button.
6. The CARS Main Menu is displayed.

Navigation
The same methods used to navigate Internet Explorer are also used to navigate in CARS. The following lists the most common navigation tools used.

1. Links
    Links are usually colored, underlined text but can also be a picture or 3-D image. To check whether an item is a link, put the mouse pointer over the text or the image. If it turns into a hand, it is a link. Clicking on the link will take you to the page indicated by the link.

2. Text Box
    Text boxes are used throughout CARS to enter data composed of numbers, text or both. A cursor will appear when you click inside the text box and data can be entered in the box. Sometimes data will be entered in a series of text boxes. Use the TAB button to move to the next text box.

3. Drop Down Box
    A drop down box looks similar to a text box but it has an arrow pointing down on the right side. By clicking on the arrow, a list 'drops down' from the box with a list of different options that may be chosen to fill the box.

4. Check Box
   Check boxes can be used to modify data or select a certain record. A check box is a square next to entered data or a record. Clicking inside the check box will put a check mark or an 'X' in the square. This indicates the data or record has been selected.

5. Buttons
   Buttons are used throughout CARS to perform various functions such as SAVE, RETURN, SEARCH, etc. Clicking on them activates these buttons.

6. Radio Buttons
   CARS also uses radio buttons. These are small circles followed by text and are used to pick a certain option within a data entry page. To select an option, click inside the radio button and a small black circle will appear. Only one choice can be made in a group of options with radio buttons. If you click on one radio button in a group of options and then click on another, the black circle will disappear from the first choice.

Input Basics
The following list is basic information needed to enter data into CARS.

1. CARS uses a time out feature. The session will time out after 30 minutes if there is no activity registered and data entered but not saved may be lost. If you are logged on and are interrupted, it is recommended that you click on the Save button before leaving your computer. It is also recommended that you click on the Save button every so often when entering tickets for a haul sheet, especially for haul sheets with a large number of loads. Entering tickets on the Haul Sheet Maintenance page does not register as activity and the session could time out before you finish the tickets.

2. **DON'T USE THE BACK BUTTON!**   The program will function using the back button but you may lose data or you may get a 'Warning: Page has Expired' error message. If this occurs, click the Refresh button on the Internet Explorer tool bar. A dialog box appears asking you to use the Retry button to send the information again. Click on the Retry button and you will be returned to the previous page.

3. The TAB key can be used to move from one input field to the next. As you get used to working in the new CARS format, you will find the TAB key very useful for moving around in the data entry boxes.

4. The date and time must be entered in the following formats or an error message will be generated.
   a. All time is entered as military time but also uses a colon for example 4:00 PM would be entered as 16:00

b. Dates are entered 00/00/0000
5. Station/Location format
   a. Stations are entered without the plus for example Sta. 100+32 would be entered as 10032

6. The project and subproject displayed at the top of the screen will be the same as the project from the last logon. Change these by clicking on the Project or Subproject link. This will take you to the Project Search Criteria page where you can change the project or subproject.

7. The Main Menu can be accessed by clicking on the link in the top right hand corner or the button at the bottom of each page.

8. Pay items are marked by release flags that indicate if they are paid.
   a. R – for release. Can still be edited
   b. E – examined. Selected for preliminary estimate. If the estimate is not approved, you will still have the opportunity to rectify any input errors.
   c. S – submitted. Waiting for estimate approval. At this point, records can be viewed but you will no longer be able to edit them.
   d. P – paid

9. A change order drop down box will be found in pay quantities, mix bitumen, concrete paving and haul sheets. This is used to indicate when a pay item is affected by a change order.

10. Deleting records
    a. Check box for deleting rows
    b. Delete button deletes the entire record

11. Printing reports requires having Adobe 5.0 Reader which can be obtained free from the DOT website. If the reports do not generate, check the settings. Also, the full version of Adobe Acrobat will not generate the reports. The reader will have to be downloaded and set as the program that opens the CARS reports. If you are still having problems generating the reports, you will have to change settings in the Reader by:
    a. From the Start Menu on your computer, open the Adobe Reader.
    b. Click on Edit and choose Preferences.
    c. From the list on the left hand side, go to Options.
    d. There are four check boxes under Web Browser Options. The first two boxes (Display PDF in Browser and Check Browser Settings When Starting Acrobat) should be unchecked.

Care of Computer Equipment
Proper care and treatment of computer equipment is essential to keep it in proper working condition. The following list of precautions will help keep computer equipment in good working order.

1. Computer equipment is particularly susceptible to weather conditions such as extremes in heat or cold, dust or wet conditions.

2. Make sure computer equipment is secure in field offices or vehicles. Lock the field office or the vehicle when unattended.

3. Computer equipment can be vulnerable during electrical storms especially in the field office setting. It's a good practice to turn off and unplug the computer during an electrical storm or when you leave the office for the day. Although surge protectors are an essential part of protecting your computer, they will not save it from a lightning strike.

4. **DO NOT** spray window cleaner directly on the screen of the monitor or the display on a laptop as it can damage or destroy this equipment. Cleaning supplies used specifically for monitor screens and laptop displays can be obtained from Supply.

Repairs and Other Problems
Any hardware or software problems that occur should be handled by contacting the NDDOT Help Desk at 328-HELP (4357). If the Help Desk can't assist you at the time of the call, they will log the problem and a technician will be assigned to your problem and will work with you until it is resolved.

Any problems with the CARS programs should be directed to Construction Services at 328-4418 or 328-2912.

Text Box Field Lengths

CARS uses text boxes throughout the program.   Typing in more characters than the size of the text box will generate an error. The following table lists the character length of all text boxes in CARS.

TITLE OF FIELD	# OF CHARACTERS
Change Order Maintenance Remarks	200
Change Order Maintenance Explanation of Change	3,000
Change Order Spec/Code Maintenance Description	50
Change Order Spec/Code Maintenance Other	50
Concrete Paving Remarks	200
Haul Sheet Maintenance Remarks	200
Mix Bitumen Maintenance Remarks	200
Pay Quantity Maintenance Remarks	200
Project Diary Days and Weather Maintenance Lost Time Reason	80
Project Diary Section Maintenance – Engineering Staff	500
Project Diary Section Maintenance - Work in Progress	2,000
Project Diary Section Maintenance – Labor Force	500
Project Diary Section Maintenance – Equipment Summary	500
Project Diary Section Maintenance – Project Visitors	500
Project Diary Section Maintenance – Hours Worked	500
Project Diary Section Maintenance – Remarks	2,000
Project Diary Supplement Maintenance – Short Description	30
Project Diary Supplement Maintenance – Remarks	1,000
Stockpile/Invoice Item Maintenance Remarks	200
Construction Status Maintenance Remarks	200
Weekly Progress Report Maintenance – Remarks	2,000
Weekly Progress Report Maintenance – Road Const. Map Info	300
Weekly Progress Report Maintenance – DBE Remarks	200
Contract Adjustment Maintenance – Remarks	200
Contract Adjustment Maintenance – Item Description	50
Final Checklist Maintenance – Remarks	200

ASSIGN PROJECT ENGINEERS & PROJECT PERSONNEL

After the bid opening and award process is complete, the projects are downloaded into CARS from PACER.   An email will be sent to the district engineer listing the projects from the bid opening for that district. The district engineer will assign project engineers and/or consultants for each project listed.

After the District Engineer has assigned a project engineer to a project, the project engineer will assign their project personnel. For consultants, the designated CARS coordinator will assign the project engineer to a project who will in turn assign project personnel. Project personnel will be able to update or view project information depending on the user rights they have been assigned by the Information Technology Division of the DOT.

Assign Project Personnel
To assign project personnel:

1. On the Main Menu, check to see that the project displayed at the top of the page is correct. To select a project, click on the Project link in the upper left hand corner of the Main Menu page. The Project Search Criteria page is displayed. Choose your project from the Assigned Project drop down list and click on the Search button. You can also access your project by typing in the project number in the Project ID text box or typing the PCN number in the PCN text box. You will only be able to assign personnel to projects assigned to you.
2. Once you have picked the project, click on the Project Personnel link. The Project Personnel page is displayed.
3. The project engineer's name will be listed under Assigned Personnel. Click on the Assign/Remove Personnel button. The Assign Project Personnel page is displayed.
4. A list of available personnel is displayed in alphabetical order along with their user ID's. To assign personnel to the project, click in the check box in the Assign column.
5. Click on the Save button. If you have tied projects, a dialog box will display asking if you want to update all tied projects. Clicking on yes will assign the personnel chosen to all projects tied to the one shown at the top of the page. If you choose no, you will need to assign personnel to those projects separately.
6. After the assigned personnel are chosen and saved, you will be returned to the Project Personnel page. All personnel assigned to the project will now be listed alphabetically under Assigned Personnel.

If a project engineer is assigned to multiple projects or a large project with several tied project numbers, it is possible to change projects or subprojects from any location within the CARS programs.

Change Projects/Subproject Selection
To change the project or subproject selection:

1. To change the project
   a. Click on the Project link
   b. The Project Search Criteria page is displayed. Pick the project by:
      (1) Choose the project from the Assigned Project drop down
      (2) Type in the project number in the Project ID text box
      (3) Type in the project control number in the PCN text box
      (4) Click on the Search button
2. To change the Subproject
   a. Click on the Subproject link
   b. The Subproject Selection page is displayed. All subprojects for the project chosen are displayed under Subproject Search Results. Click on the link for the subproject.
   c. The Project Search Criteria is also displayed on this page. If the project is changed from this page, the subprojects displayed will change to the ones for that project.

The CARS Main Menu is divided in two distinct categories – Maintenance and Reports. The Maintenance side of the menu is used to make entries into CARS and create reports for the information entered. The Reports side allows you to access any report already created from previously input information. Instructions for use of the various Maintenance and Report functions will be listed by type in subsequent sections of this manual.

FileNET GUIDELINES

Document Storage
The District offices shall store the following construction record documents in FileNET:

1. **Correspondence**
   All correspondence generated from the DOT will be stored in FileNET. Any correspondence received from outside the DOT will be scanned and stored in FileNET.

2. **Progress Reports**
   The original progress report with the project engineer and contractor signatures will be scanned and stored in FileNET.

3. **Inspector's Diaries**
   These diaries will be scanned and saved in FileNET. Diary pages should be saved once a week per contractor/subcontractor.

4. **Project Diaries**
   The preferred method of entering project diary information is directly into the CARS application per section 3-6 of this manual. An alternative method (DOT personnel) is scanning the project diary pages and saving them in FileNET with the following criteria:

   a. Approval from Construction Services is required.
   b. Project number must be on each page.
   c. Legibility is not to be compromised.
   d. Diary entries must be saved on a daily basis.
   e. Consistency - cannot alternate CARS entries/FileNET entries.
   f. Follow the index values listed in this section.

   In the case of projects that are not set up in CARS, such as an emergency project, the project diaries will be scanned and stored in FileNet using the criteria listed above.

5. **Piling Logs**
   Any piling logs that are not entered in the CARS system will be scanned and stored in FileNET.

6. **Bench Mark Books**
   All field books used for bench marks will be scanned and stored in FileNET.

The following documents will by mailed to Construction Services where they will be scanned and stored in FileNET and distributed when required.

1. Change Orders
2. Requests for contract time extension
3. Requests to sublet and subcontract agreements

Index Values

The following index value will be used when project records are stored in FileNET:

1. Project number
2. Document type
3. Subject/Title
4. Record Control Number (**ALWAYS USE 800334**)
5. PCN
6. Highway/Location
7. Division number

These index values are the minimum that should be entered. Any additional index values know at the time the document is created should also be entered.

Final Records

All construction project records will continue to be sent to Construction Services as outlined in Section 7 of this manual. This includes all final paperwork required on the Final Records Checklist.

Records from projects that are field engineered by consultants or counties will **not** be stored in FileNET. These records will continue to be collected and maintained as detailed in this manual.